TITLE OF GROUP OF CLASSES: CHIEF CIVIL ENGINEER

TITLE OF CLASSES IN GROUP: Class Code:

 (BRIDGE DESIGN)
 02968901

 (CONSTRUCTION & MAINTENANCE)
 02968902

 (MATERIALS)
 02968903

 (ROAD DESIGN)
 02968904

 (TRANSPORTATION PLANNING)
 02968905

 (TRAFFIC DESIGN)
 02968906

 (MECHANICAL)
 02968907

Pay Grade: 38A EO: A

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To be responsible for the administration of the statewide engineering program in one of the areas of specialization: Bridge, Road Design, Road Construction, Materials, Traffic, Transportation Planning and Mechanical Systems; to coordinate such program with overall departmental programs and activities; to be responsible for the evaluation of the effectiveness of this program and its personnel; and to do related work as required.

SUPERVISION RECEIVED: Works under the general direction of a superior with considerable latitude for the exercise of independent judgement in technical and administrative matters; work is reviewed for conformance to policies and instructions.

SUPERVISION EXERCISED: Plans, organizes, directs, coordinates, and reviews the work of professional, technical, sub-professional, clerical, and other employees.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To be responsible for the administration of a statewide engineering program in one of the following areas of specialization:

The design, construction, maintenance, and operation of bridges in the state's highway system; the recommendation for the most suitable site and type of structure for each bridge project; the negotiation with engineers, contractors and representatives of the Federal Highway Administration for changes in construction plans; the field inspection of bridge construction and maintenance projects to assure compliance with plans and specifications by contractors; the coordination of the program with the overall departmental programs and activities.

The field inspection of all state road construction/maintenance activities or projects to assure compliance with plans and specifications by contractors; the negotiation with engineers, contractors, and representatives of the Federal Highway Administration for changes in construction plans and the checking and approval of contract changes and all payments to contractors for work done; the investigation of claims and complaints relative to the prosecution activities.

The sampling, testing, and inspection at the site, the laboratory or at the originating source of all materials used in state construction; the preparation of methods and procedures for specific tests of materials used in state construction, the obtaining of certificates of compliance, where necessary from materials manufactures and the issuing of materials certificates stating acceptance and/or rejection of the various materials used in a project; the maintenance of records of all samples taken and all tests made; the implementation of a control testing program to assure the proper functioning of the regular testing and sampling program, the coordination of the program with the overall departmental programs and activities.

The designing of roads in the state's highway system; the development of design criteria and standards; the scheduling and coordination of location studies; the direction of preliminary engineering and final design activities; the maintenance of effective working relationships with representatives of Federal Highway Administration on federal aid projects; the providing of guidance and assistance of engineers in the interpretation and application of engineering and design criteria and standards; the coordination of the program with the overall departmental programs and activities.

The development and administration of a statewide transportation planning program involving highways, rails and mass transit; the assignment and scheduling of staff; the direction of special consultant studies; liaison with federal, state, and local officials in the development of program plans; the coordination of additional activities with the overall departmental program.

The conducting of traffic engineering, regulatory and control investigations and studies; the gathering, analyzing, and interpreting of data for use in solving engineering and education problems involved in traffic control; the making of charts, graphs, and reports of such subjects as speed, no passing, school and loading zones, parking, traffic channelization, accidents, one-way streets, detours emerging and through routes, the analysis of highway planning studies relating to speed trends, the making of specific speed studies relating to particular highways; the establishment of revision of speed limits; the reviewing of geometric designs and making recommendations thereon; the providing of advice on the aspects of the manufacture and use of projects; and other allied traffic engineering functions; the establishing of standards for the installation and operation of traffic control devices.

The design, construction, plan review, code enforcement, and administration of the state's mechanical, energy and industrialized building codes; the recommendation for the most efficient and suitable mechanical design for each state building project; the implementation of the state's participation within the Interstate Compact for Industrialized Buildings; the field inspection of all mechanical systems for buildings under the jurisdiction of the State Building Commission to assure compliance with plans and specifications by contractors; the coordination of the program with overall departmental programs and activities; the providing of guidance and assistance of engineers and architects in the interpretation and application of engineering and design criteria, standards and codes; the coordination of the program with overall departmental and state agency programs.

As required to be responsible for personnel and labor relations matters.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of the principles and practices and techniques of civil and mechanical engineering and the ability to apply such knowledge in the administration of statewide engineering program in the field of specialization and ability to read and interpret all types of civil engineering and mechanical plans and specifications and to approve or reject proposed changes therein; the ability to plan, organize, direct, coordinate and review the work of a subordinate staff of professional, clerical and other personnel; the ability to evaluate the effect changes, where necessary, of an assigned state-engineering program in the field of specialization; the ability to establish and maintain effective working relationships with associates, contractors, representatives of state and federal agencies, superiors, and the public; and related capacities and abilities; a through knowledge of the state's building, mechanical, energy and industrialized building code.

EDUCATION AND EXPERIENCE:

<u>Education</u>: Such as may have been gained through: graduation from a college of recognized standing with specialization in Civil and Mechanical Engineering; and

<u>Experience</u>: Such as may have been gained through: employment as a professional civil engineer <u>or mechanical engineer</u> in a responsible administrative and technical position in a specialized engineering program such as highway or bridge construction or engineering program such as highway or bridge construction or design, road maintenance, transportation planning, traffic, <u>mechanical</u> or other comparable level civil engineering program within a public agency or in a private industry.

<u>SPECIAL REQUIREMENT:</u> At the item of appointment must possess a certificate of a Registered Professional engineer issued by the Rhode Island State Board of Registration for Professional Engineers and Land Surveyors and must maintain such certification as a condition of employment.

Class Revised: June 22, 1997 Editorial Review: 3/15/03